

Aviation News

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"Flying Mailcar": Following closely on the report by Gael Sullivan, Second Assistant Postmaster General, on the future development of airmail service, is a projected conversion of the Fairchild C-82 Packet into a cargo mail carrier. The Fairchild company has prepared designs for the modification, together with performance data which show the craft could handle seven tons of mail on short hauls and six tons over a 500-mile distance. (Story on Page 7)

NAA Lightplane Will Sell For \$6,100 At Factory

Four-place craft has estimated cruising speed of 150-mph., 160-mph. top.....Page 13

New Texas Intrastate Airline Expanding Rapidly

In business little more than three months it has 19 planes serving 50 communities.....Page 27



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THE AVIATION NEWS

Washington Observer



NATIONAL AIR POWER POLICY—Lack of a national air power policy has been a decided detriment to aviation in carrying out its reconstruction program. Hearings on the Mitchell bill for creation of a National Air Policy Board is consequently of vital significance to the industry. Sen. Mitchell (D, Wash) became convinced of the necessity for a definite national air policy after several extensive hearings on disestablishment of the aircraft industry. It appears now that hearings will start in about three weeks.

BOARD POTENTIALITIES—The Mitchell bill which now is before the Senate Commerce and Foreign Commerce committee proposes a nine-man board similar to the Morrow Board appointed by President Coolidge in 1925. Importance of the electricity is emphasized when it is recalled that the Morrow Board report was the genesis of the Air Corps Act of 1926, the Naval Aviation Act of 1926 and the Air Commerce Act of 1926, all of which were of tremendous importance to the aviation industry.

AVIATION LEGISLATION DELAYED—Any action by the House Committee on Commerce committee on aviation seems the center of this year appears doubtful. Other work has priority. Members are preoccupied with campaigns for reelection. Chairman Lee plans to leave for California shortly for a seven-week stay. When he returned Congress will be in its usual pre-july adjournment jam session. The lame-duck Congress which will reconvene for a brief

session after the November election will be hesitant to take action on matters of importance.

OVER ALL TRANSPORTATION PROBLEMS—The overall transportation investigations planned by the Commerce and Foreign Commerce Committee is not expected to get far this year. With the \$10,000 allocated, the committee started off the inquiry by having one investigator to India and Captain Smith 500 reports which have been filed with the group.

INTERNATIONAL HEARINGS—Senate Commerce Committee expects to resume hearings this week on international aviation bills pending off with Almon E. Rust, president of the National Federation of American Shipping, and representatives of the Railway Brotherhood as witnesses. Both spokesmen have asked to testify on the Bermuda agreements—in opposition.

SURPLUS ENGINE DISAGREEMENT—War Assets Administration and Pratt & Whitney again have failed to come to an agreement on the Navy's latest bid for an agency agreement on surplus P&W engines. WAA generally sells to an agent at below market price to allow agent to resell and sell at a profit. P&W offered to take all engines at 100 percent of market price, if WAA would make the same terms to any other applicant for an agency agreement for P&W engines. Neither WAA nor Justice Department would approve the offer.



Rear View of the HO4S, current Army helicopter, about its landing stage. (Story on Page 8)



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CONTENTS

	PAGE
Washington Observer	5
Industry Observer	5
Weather News Items	7
Editorial Page	10
Features	10
Special Air Service	27
Transport	28
Weather	30
Editorial	40

The Photo

Vol. 1, No. 12, Page 4, 11

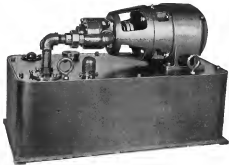
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8544 issues, \$712.00; 8556 issues, \$713.00; 8568 issues, \$714.00; 8580 issues, \$715.00

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McGraw-Hill Publishing Co., Inc.

April 1, 1946

Fairchild C-82 Packet Modification Seen As Possible Cargo Mailplane

Could handle 7 tons on short hauls, 6 tons for 500 miles; post-point is significant in view of Sullivan's report on development of airmail service.

By SCOTT HERSHEY

Fairchild Aircraft, whose C-82 Packet cargo plane found favor in Army circles, now has designs for a 180-mph flying mailcar which would be a modification of the AAF's "Flying Boxcar" capable of handling seven tons of mail over short hauls.

The announcement has particular significance in view of the recent statement by General Alexander Postmaster General Carl Sullivan that all long haul first-class mail could route by air at a three-cent rate without loss and that an air parcel post system should be established (AVIATION NEWS, March 25).

Officials Inspect Plans—Fairchild's announcement, incidentally, came after Post Office and Air Transport Association officials had inspected the Packet cargo plane, which is now in quantity production at the Fairchild factory in Hagerstown, Md.

The interior of the Packet's sparsely furnished fuselage has been adapted to meet the needs of the Post Office Department with installation of such equipment as a service table, letter rack, chested locked drawers for registered mail and bag racks. The equipment is lighter and more compact than that used in railroad

mailcars and designed for more efficient handling of mail.

Provides Time Savings—The Packet can handle mail loads up to six tons on a 500-mile non-stop trip or more than four tons on a 1,000-mile non-stop flight. The plane's cargo hold, 35 ft long, is shaped like a railroad boxcar and has approximately 20 percent as much cubic capacity.

Part in the air, the Packet is a three-sever on the ground. The tail splits and swings open to the full width of the fuselage. Mail by the truckload can be walked onto the cargo door and stored in compartments. A forward door opens on the storage space extending from the nose to midships. In the midship wall, a door or chute is provided to open directly into the sorting section. When the tail is closed it becomes an additional storage space.

Person Likes Plane—Robert B. Burgess, superintendent of Air Mail Service, commented that the Packet looked like an ideal plane for the airmail job. He said it was "large enough, fast enough and quick to load. There's plenty of room inside for six, two or even three clerks to sort the mail as route."

One of the greatest difficulties of the Post Office Department is to move airmail as quickly as possible during peak delivery periods and Burgess said that much time is lost because the peak load of airmail is distributed among several planes leaving hours apart.

Could Set New Schedules—"If the airlines operated a few all-mail planes," he said, "airmail could be set in correspondence with these peak periods in mail traffic."

Congress seems to be favorably disposed to a reduction in airmail rates and Sullivan has introduced legislation providing a 5-cent air mail domestic air postage rate with a subsequent reduction, in addition to suggesting that permit the average of all long-haul first-class mail by air should be adopted as base.

Stabilization Urged—Sullivan holds that airmail rates must be stabilized and further reduced and that until the Department knows definitely the rates on which it can depend, "any major program is shrouded in uncertainty."

Also, until a lower rate is established approximating the 12 cents per ton-mile proposed in the slow mail orders of the CAB of Dec. 22, 1944—or even lower rates based on the cost of performing the service required by any particular kind of air traffic—the volume of mail that can be provided by the Post Office Department in furtherance of airline expansion will be restricted by the limitations of its revenues.

Design Is Major Step—While there are many improvements which will have to be perfected to free air transportation from weather



"Flying Boxcar" as "Flying Post Office." The Fairchild C-82 Packet, nicknamed the "Flying Boxcar" by Army pilots, may become a flying mailplane if de-

signs worked out by Fairchild engineers are favorably received. Sketch shows interior arrangement, similar to railway mail cars but much lighter.

in shackles and make it available for the major responsibility of resupplying all long-haul mail on regular schedule, the Fairchild 441-plane possesses a major step forward toward this objective.

The need for stressed ground service is growing rapidly and accurate transport facilities, with its responsibilities divided between passengers and mail will soon be inadequate.

Specifications Given—The layout of the Fairchild plane, built with its recently, cargo and mail of loading, have attracted the attention of various Post Office officials as well as meeting this problem.

Operating weight of the aircraft Packet cargo will be 26,517 lbs. of which 735 lbs. would be for pilot, co-pilot, mail clerk and their baggage and 817 lbs. for mail and provisions such as toilet and food, tables, blankets, partitions, bed-bunkers, stoves, fixtures and miscellaneous, for a total of 26,119 lbs. Fuel and oil would add 4,538 lbs. for 1900-mile trip at 10,000 ft. operating altitude. An additional 906 lbs. for the mail storage section and 11,581 lbs. for the mail storage section.

For a 1,900-mile trip with an operating weight empty of 26,119 lbs. the fuel and oil would add 7,778 lbs., the mail storage section 1,089 lbs. and the mail storage section 8,511 lbs. for a total of 49,089 lbs.

PBY-5A Converted By Canadian Company

What is believed to be the first PBY-5A Canine amphibian to be converted from wartime use for peacetime freight has left Canadian Car & Foundry Co. aircraft plant at Montreal, St. Catherine, the amphibian was sold by Canada's War Assets Corp. to Cals, Inc., New York, for Texas Oil Co., for use in carrying freight and passengers between Bogota and Canadian oil fields.

Conversion charges included taking out the front turret and replacing with a rounded nose. Freight doors were placed on the sides of the fuselage where wartime maintenance bay doors were located. Bulbous openings in interior of plane were enlarged to facilitate shifting of freight. The inventor's and written operator's compartment in the rear structure was removed to clear for freight.

Passenger Accommodations—Re-



"Flying Mailbox" Detail: Artist's sketch of the mail carrying section which would be installed in the Fairchild Packet to equip it as an airmail freighter.

head the water freight compartment is a passenger cabin with four up-holstered reclining seats with windows stenciled. A door leading into the cabin for passengers which no freight is carried in main compartment.

War plane has been stripped off, wing fabric replaced. Aircraft is equipped with two Pratt & Whitney two-cylinder engines of 1,250 hp each. Place retains its wartime specifications, can take a 5,000-ft. payload.

The Canine or Canine amphibian is a low-wing, single-engine aircraft with a large number, to be offered for sale by WAC. Nine are authorized to have been sold to private U. S. war surplus.

AAF Training Command Transfer Is Completed

Transfer of Army Air Forces Training Command headquarters from its wartime location in the Texas and Pacific Building, Ft. Worth, Tex., to Bendish Field Co., has been completed in line with the peacetime AAF policy of consolidating all permanent installations for maximum economy in the post-war training program.

The command headquarters at Bendish has been established in a completely re-decorated three-story building, with almost all offices at the headquarters being situated in the one structure.

Headed By General—Lt. Gen. John K. Cannon, wartime Com-

manding General of the 10th Air Force and more recently Commander of the U. S. Air Forces in Europe, has recently been named Commanding General of the Training Command (Aviation News, March 18). AAF housing is directed through the Flying Training Command, Randolph Field, Tex., and the Technical Training Command, Scott Field, Ill. More than 20 subordinate stations are operated by the two units.

Simplified Operation Claimed for XR-9B

New G & A helicopter, with low- or power-to-speed ratio, may be commercial contender.

Reduction of the power-to-speed ratio for helicopters accomplished in the AAF's new XR-9B (Photo as per 2), manufactured by G & A Aircraft, Inc., Willow Grove, Pa., prototype helicopter, coupled with the simplicity of operation claimed for the new aircraft, makes it an interesting new contender among possible commercial helicopters.

The XR-9B (Aviation News, March 11) is powered by a 140-hp Lycoming engine, yet it has flown faster than 100 mph and cruises at approximately 80 mph with fuel for more than three hours of flight. It has a service ceiling of over 10,000 ft. and a rate of climb better than 1,000 ftp.

Field Easy to Fly—Lt. Col. G. S. Wilson, chief of Wright Field's rotary wing section, is quoted as stating, "I believe anyone can be taught to fly this helicopter in 10 hours or less."

Acting as this belief he is planning an experimental instruction course for new pilots but not previously flown airplanes, to see how rapidly they may learn to fly the XR-9B.

Flight Control Described—In flight directional control is obtained by use of conventional rudders, but a device which actuates the torque correction supplied by the tail rotor. A conventional control stick governs horizontal travel of the aircraft as may direction, by controlling the cyclic pitch of the main rotor.

An electric-hydraulic governor will maintain constant predetermined rotor speed regardless of throttle condition or power used. This rotor is geared to ascend or descend vertically, solely by pitch of the blades with the auto-

matic assistance of the governor.

Rotor Details—The three-blade main rotor is 22 ft. 3 in. in diameter, while the tail rotor is 8 ft. 6 in. in diameter. The helicopter is 21 ft. 7 in. long, 8 ft. 4 in. high, and 9 ft. 8 in. at the landing wheels.

Rotor blades are tapered from 15.5 in. chord at the root, to 5.5 in. at the tip. They are constructed of wood and plywood, over steel tube spars, and finally fabric covered and doped.

The welded steel tube fuselage is covered with aluminum alloy skin, except for the transparent bubble nose section. The tailboom has a bubble nose with a fixed skin.

Simplified Design—Designed for easy dismantling for storage or shipment in cargo aircraft, and for easy access to powerplant and transmission for maintenance, the XR-9B is designed mainly for military use as a scout or liaison helicopter. G & A engineers have enlarged the cabin and made other changes from the standard XR-9 which they believe now puts the aircraft in the class of a general purpose helicopter for commercial air line, patrol and rescue work, and they regard it as the forerunner of an ultimate family size of the air.

Curry Expected to Stay As Colorado Air Head

May Gen. John F. Curry (retired) is expected to stay as Colorado's Director of Aviation. A flurry of appointment which pointed an appointment by Gen. John C. Vinnick has been given.

It was caused largely by the fact that Gen. Curry, the governor's choice from the start, was not on a list of those possible candidates submitted by the newly-created State Aviation Commission, as prescribed by law.

Under Colorado law appointments may be made only previously to the Civil Service Commission can examine candidates and certify a permanent appointment. However, the provisional appointment may hold office for years until the Commission acts.

Approved By Commission—Gen. Curry was approved by a majority of the commission as temporary director. Gen. Vinnick said that while Gen. Curry's name was not on the first list of three submitted to him by the Aviation Commission, it was as a supplementary list. The position pays \$5,000 yearly.

FLC Soon May Be Transferred From State Department To WAA

Move seen likely as result of highly critical report by Senate's Head Committee on Department's surplus-handling record, and failure of FLC sales center at Miami.

By WILLIAM KROGER

A Senatorial spotlight on the disposal of surplus property abroad, combined with an apparent blunder on the part of the Foreign Legion Commission in establishing an elaborate export plan center at Miami, points to the possibility that FLC may shortly be shifted from the State Administration which became an independent agency last week, succeeding War Assets Corp.

The Senate Committee investigating the National Defense Program (Aviation News) was highly critical of the State Department's policies and actions on overseas surplus disposal in a report prepared by Sen. James H. Tamm (D., Ind.) and William F. Knowland (R., Calif.) on the basis of a round-the-world trip.

"Four Bargains" Secured—Learned particularly was the "poor bargain" with Great Britain, the first task sale of overseas surplus

to a foreign government, whereby the U. S. is to receive approximately \$150,000,000 as a write-off on some \$15,000,000,000 worth of lend-lease.

The report stressed the commercial possibilities inherent in the sale of overseas surplus, the possibility that such surplus would have in selecting foreign markets to buy from this country in the future in private commercial transactions. It recognized, however, the difficulties which have plagued FLC, shortage of distribution, severe competition, and a prohibition by foreign governments against selling to private interests.

Study Four Shown—The possibility of extending foreign purchases to the United States, and a prohibition by foreign governments against selling to private interests. FLC is set up as the aircraft export sales center in Miami, primarily to serve the Latin American market. With modern merchandising methods, the committee is convinced, in the aircraft industry, FLC has made a very poor showing.

Actually, it has had little to sell, for War Assets Corp., with America's largest fleet of surplus aircraft, had not made many planes available to FLC.

Formerly Reminded—This was reminded in a certain extent in March, with FLC acquiring a number of PT-17s for its Miami office. When sales of these can be used as an effect in the previous figures, FLC will release statistics on its total Miami sales.

However, FLC and WAA have discussed an apparent suggestion of the Miami center (Aviation News, March 25), and it would not be too surprising were FLC to withdraw.

Because of FLC's problems stand with dollars, the haggling of other governments, and military demobilization that has left no troops to guard the surplus, the material is being turned back to this country and turned over to WAA for disposal as fast as ships and space is available.

Not Yet Export Division—Shortly before WAC passed out of existence, it established an Export Division to



WEDDING PRESENT:

Post Master, Los Angeles charter operator who recently purchased all the 389 surplus planes at the Midway, Calif., depot, points to the transportation of the propeller of a 38-77 which he gave as a wedding gift to Farrent Dickers, actress, and Irving Moss, Columbia Pictures assistant director. More was a 37-77 plane for four years during the war.

will surplus located in this country, to both civilian governments and foreign business enterprises. This division is being continued by WAA.

This points a disclaimer of functions for EAC. Although the Senate committee approved of the principle of having the State Department handle disposal of overseas surplus because that took control from civilians, State still has an great desire to continue in the surplus program. Aware that it is continually open to criticism in its handling of its customary functions, it has been loath to play a part in surplus disposal—and become an even greater target for attacks.

\$639,640 Slashed From CAA Allocation

Sliding \$639,640 off the Budget Bureau estimate the House Appropriations Committee last week recommended a \$3,948,240 deficiency allocation for Civil Aeronautics Administration operations through new and July.

Funds approved by the House committee were:

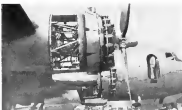
- General administration, \$16,000—or \$16,000 less than proposed by the Budget Bureau.
- Establishment of air navigation facilities, \$428,000.
- Maintenance and operation of air navigation facilities, \$749,650—or \$1,044,645 less than proposed by the Budget Bureau.
- Safety regulation enforcement, \$248,000—or \$148,000 less than proposed by Budget.

- Maintenance and operation of aircraft, \$303,775—or \$343,795 less than the Budget estimate.
- Construction at Washington National Airport, \$1,348,000 and for construction at other airports, \$1,000,000.

Budget requests for the establishment of air navigation facilities and for construction and maintenance at the Washington airport were approved by the House committee in full.

130 Employees Advanced—The \$28,000 approved for CAA administrative expenses will be used to meet salary requirements resulting from the upgrading of 139 CAA employees. The \$14,000 cutback involves cuts their four underlings contemplated by the CAA.

Establishment of a "pilot shift" to act as liaison for the CAA with PICAOs in Montreal and with Air Canada's Montreal. CAA asked \$18,000 to establish liaison with the international aviation co-



WRIGHT-ROHR "POWER EGG"

Quick and easy access and complete interchangeability at any of four speed stages are features of Wright Aerochemical Corp.'s new Wright-Rohr Power Egg (Aviation News, March 25). Designed primarily for the DC-4, it houses the new Wright W5D Cyclone engine. Certification test flights of the new power egg, first to be produced by an American engine manufacturer, were completed recently at Santa Monica, Calif., by the Civil Aeronautics Administration. The test can be installed on a plane in 28 minutes.

operation and the inter-departmental government aviation group.

- Establishment of a "standards coordinator" to work out a standardization of government aircraft requirements with the Army and the Navy.
- Establishment of new foreign field offices, at an estimated cost of \$11,000. The office to offer services to international air operations would be located at Lima, Peru; Rio de Janeiro, Brazil; C. Z. Mexico; Madrid, San Juan, P. R., Manila; New York, and New Orleans.

Establishment of an aviation production statistics service. CAA asked \$12,000 so that it could carry on this function, performed during the war by the Aircraft Resources Control Office of the WPB.

Improvements Planned—The \$28,000 granted for establishment of air navigation facilities will enable CAA to make improvements along the Denver-Los Angeles route, enhance its facilities in Alaska, and establish teletype installations in Weather Bureau stations to improve air weather reporting services.

Canadian Surplus Sales

Canadian War Assets Corp., government war surplus disposal agency, added surplus value of \$185,000 in February, as follows to figures

for \$88,850 aircraft components for \$28,321, aircraft instruments for \$2,524, aircraft war materials for \$6,359 and aircraft engine components for \$10,238. Aircraft radio equipment with direct domestic application has been turned over by WAC to the Canadian government for its veterans rehabilitation training program.

Annapolis Air Department To Be Opened in July

The Naval Academy's aviation department, now being organized by Capt. Robert S. Fane, is expected to be in operation when the next semester begins in July 5.

An aviation aviation program has been proposed by Vice Adm. Aubrey W. Fitch, academy superintendent, including an airport which will cost perhaps \$12,000,000 in its initial phase and designed to accommodate every type of aircraft used by the Navy.

Work Give Flight Training—Ann of the aviation department which will be integrated with the regular academy course is to give every midshipman basic aeronautical training. Fundamentally the aviation department will be concerned with aeronautical education rather than flight training, although after this year every midshipman before graduation will be given sufficient instruction to enable him to solo.

New VA Set of Standards Due To Clarify Veterans Training

Revisions being prepared in cooperation with CAA and industry are expected in about two weeks, CAA, nationwide, warm prospective A & E mechanics that schools must be approved.

Aviation training for veterans, confined by the requirement that only schools approved by states can participate, is expected to be clarified possibly within two weeks by a new set of standards being drawn up by the Veterans Administration in cooperation with CAA and industry representatives.

Meanwhile, CAA has moved to play a larger part in the program through a warning to veterans that only those taking training at CAA-approved schools can qualify for the airplane and engine mechanic's examination. This in effect, it is pointed out, gives CAA—said not VA or the states—the power over schools in which a veteran may take a mechanic's exam.

CAA Outlines Policy—CAA is an "information package" to veterans, stated it will not recognize correspondence courses, nor mechanical services in non-CAA-approved schools. A veteran taking other type of course will be required to have a full year of "broad practical experience" or work in the field.

It is not anticipated a veteran will receive a mechanic's license without the objective of obtaining an A & E license, as a license is necessary to hold the best jobs in the field.

Compulsory Under Act—The Department's Board of Vocational Rehabilitation, VA and the state education department, had down minimum standards. Rates on light airplanes to be used for solo were set at \$17 and \$8 solo.

VA up to now has insisted all suggestions that it lay down rules for training with which schools would have to comply in order to avoid the "fly-by-night" and incompetent schools.

Taken Out of VA's Hands—The CAA ruling, however, takes the determination out of the hands of VA and the states so no veterans would start a school for mechanics training when that school, not VA, set its standards. CAA representatives it is believed that the forthcoming

ing standards of VA, while an endorsement on the state approval authority, will, by stipulating how much will be paid for a course containing certain elements, dampen some of the fears that have been expressed.

Trade Groups Active—Another agreement, which perhaps will alleviate their fears, is well as avoid some confusion inherent in the CAA ruling, is underway in various states. The New England Aviation Trades Association, for example, has an arrangement with the Massachusetts Department of Education whereby the department will approve CAA primary and advanced standards.

In Michigan, a standing advisory committee of eight members has brought together all interested groups to their veteran instruction in that state. On the committee are representatives of the state departments of Aeronautics and of Public Instruction, the Michigan Aviation Trades Association, the regional office of CAA and VA, and of the 250 flying school operators in the state.

Ohio Group Sets Up Rules—In Ohio a committee of operators met at the office of State Aviation Director C. E. Brown, and with representatives of VA and the state education department, had down minimum standards. Rates on light airplanes to be used for solo were set at \$17 and \$8 solo.

Other Countries—In addition to Ohio, Massachusetts, California and Douglas commercial planes, Ryan manifeolds also will be furnished under new contracts for the B-35 bomber, new version of the B-35

airplanes used for instrument training cost \$18 per hour. Note on the two-engine Cessna at \$40 per hour. While Ryan's new standards, there are variations, are operator being approved for a \$35 rate on B-35 for instrument training, and \$12 for work in a Piper Cub whereas the standard rate for similar training is a 7T at \$15.

Ryan Manifest Orders Total \$2,500,000

Ryan Aeronautical Corp.'s standard used manufacturing division has signed contracts totaling more than \$2,500,000 in new exhaust manifold business in the last 60 days.

T. Claude Ryan, president, said a large share of this business was for installation of Ryan manifolds on new long-range passenger and cargo transport planes. Under the contracts just signed, Ryan manifolds will be standard equipment on Boeing C-97 Superfortresses and on the Douglas DC-4 liners.

Wall Supply Pre-empted—Previously additional contract just obtained by Ryan is that with General Electric for parts for that company's new prop-jet power plant which turns a propeller by means of a gas turbine and at the same time provides jet propulsive thrust from the engine's exhaust.

Manufacture of jet propulsions engine assemblies represents a new field which the company expects to represent an important share of future business for the standard plant division.

Other Contracts—In addition to Ryan, manufacturers of Boeing and Douglas commercial planes, Ryan manifeolds also will be furnished under new contracts for the B-35 bomber, new version of the B-35



PREFABRICATED HANGAR:

This large prefabricated hangar, furnished by Ryan-Neuman Corp., Wheaton, Texas, for Spartan School of Aeronautics, Miami, Okla., is 240 ft. long, 146 ft. wide with a 16-ft. clearance, and cost \$29,000 delivered and erected. Erectors cost generally run about 20 percent. Passage of the Federal Airport Act and bill is expected to lead to a new type of structure, since the bill prohibits federal share in the construction and this type is claimed to be less expensive than the conventional one.

Many Military Orders — In the military field, the company also has new orders from Lockheed for exhaust collectors for the F-105, multi-engined patrol and search bombers from Northrop for the four-engineered B-50 flying wing bomber; from Douglas for the C-54 Skyquester and C-54 Globemaster; and from Martin for the Master, the Navy's newest carrier-borne drive and torpedo bomber.

Ryan also is handling replacement orders on all of Douglas's major transports.

EAL Names France As Maintenance Chief

Seattle joins United Air Service, Cal. Road work in TWA once more.

Transfer of a veteran aviation figure from the military to the transport field was among the commanding personnel changes announced last week.

C. W. France (photo), formerly vice-president of Curtiss-Wright Corp., has been elected vice-president in charge of maintenance and engineering for Eastern Air Lines, New York City, at the major operations base in Miami.



Before joining EAL, he had been president of C.W. in 1950. France was with Eastern in operations manager. He will be in charge of all maintenance and engineering activities resulting from addition of four engine planes and operation of the newly acquired Miami-Caracas plant.

Stanley J. Steele (photo), who has been in charge of Eastern's aircraft maintenance and airframe operations for the American Overseas War Airplane Administration, has been named to become manager of Eastern Air Services, Ltd., Newark. He will be engaged in aircraft and engine



operation activities at the New York City office. Steele was with Reconstruction Finance Corp., and prior to that was chief of the aircraft division, CAA War Training Service.

Cal. Air Road has joined the executive staff of TWA, although his actual position has not been indicated. Reed will be stationed in Kansas City where he served with the Federal Bureau of Investigation, and formerly was chief of police.

Airborne Television Uses Demonstrated

While having little immediate use in commercial aviation, airborne television points the way toward many revolutionary air combat activities, it was made apparent in the first public demonstration of war-developed equipment by the Navy and Radio Corp. of America recently at the Naval Air Station, Washington, D. C.

The Navy sent eight B-26 Mitchell bomber trainers to dash back "cockpit views" as picked up by television cameras in the planes' noses, to several places before witnesses in the grandstands of the air station.

Free Reconnaissance Operation — While the two aircraft cruised in the vicinity of Washington, a Navy modification of a Martin B-26 Mitchell bomber, taken off the Navy's fleet, was ordered to fly over Baltimore, to pick up the plane, to return to Annapolis and then to a rendezvous with Navy fighters from the Potomac River base. It then flew into Washington.

The entire trip was seen by the audience at Washington just as the wings of the plane rose in the air.

Free Set Development — The plane received a television camera of one of the most advanced equipment—an aerial camera with an eyepiece substituted for plates and the camera film in the cockpit. Navy designs for this equipment.

"Black" This camera is aimed by aiming the plane.

The second form of equipment, designated "Blue," was a B-26 with a camera and a voice control that can be used in any direction. "Black" is a short-range equipment, transmitting an image 15 to 30 miles. "Blue" transmits much ranges up to 200 miles from an altitude of 15,000 ft.

Used In Revolution — "Black" equipment was used during the war in attacks on Bismarckville and Rabaul, and in guided missile. Chief command use of airborne television is expected to be in guided missiles and for reconnaissance aerial reconnaissance whereby a command post can see what the pilot sees at the same time he is seeing it.

This will in large measure replace aerial photography reconnaissance. Reason of the camera is security more than that of the human eye. The fact, combined with the camera's

cannot penetrate fog, darkness or low visibility to any great extent, does not make it applicable to aerial reconnaissance problems yet, except in the case of ground aircraft used in experiments. Airborne television will be used in drone planes surveying the results of the atomic bomb test this summer at Bikini Atoll.

Crewed Named President Of National Air Races

Franklin C. Cleveland, president of Thompson Products, has been elected president of the Cleveland National Air Races to be held at Cleveland Airport Aug. 25-Sept. 2. A five-year lease has been signed with the city of Cleveland for use of the airport and a five-year franchise on the race skinned from the National Aeronautic Association. Benjamin T. Franklin, executive vice-president of the National Aeronautic Association, was elected president of the Cleveland National Air Races, which is held annually in Cleveland, has been named as general manager of the race, said to be held from 1954.

AVIATION CALENDAR

Sept. 1—1954 National Aeronautic Association (NAA) Convention, Sept. 1-5, 1954, at the Waldorf Astoria Hotel, New York City. The NAA is the largest aviation organization in the world. It is the only one that is not a government agency. It is the only one that is not a government agency. It is the only one that is not a government agency.

Sept. 15—1954 National Aeronautic Association (NAA) Convention, Sept. 15-19, 1954, at the Waldorf Astoria Hotel, New York City. The NAA is the largest aviation organization in the world. It is the only one that is not a government agency. It is the only one that is not a government agency. It is the only one that is not a government agency.

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PRIVATE FLYING

New North American Lightplane To Sell For \$6,100 at Factory

Four-place craft, named the Navion, has estimated cruising speed of 150 mph, 160-mph top speed, loads at 54 mph; high maneuverability claimed for special-design wing.

By ALEXANDER McSWEENEY

A price of \$6,100, flying English, Calif., has been set for the all-metal four-place Navion, the entry of North American Aviation, Inc., in the personal airplane field. First major West Coast plant difficulty to throw its hat in the personal aircraft ring, North American's new Navion will be watched with close attention by other manufacturers, large and small, as well as by all other phases of the aviation industry and the flying public.

Top Speed Set at 150 Mph — The low-wing Navion, which has a cabin interior 45 inches wide and with the accommodations of a luxury automobile, has an estimated 150-mph cruising speed, top speed of 160 mph, a 54-mph landing speed, and an estimated 700-mile maximum range. Actual performance figures waiting CAA certification.

The Navion has a new special-design wing, which, its engineers report, gives the plane unusually good adverse control at low speeds

approaching stall. Root sections of the plane are the first to stall, eliminating tendency for the plane to roll and maintaining good adverse control up to and through stall. The wingtip is inclined three degrees nose down, relative to the rest of the wing.

Large Cabin Door — In addition the tip airfoil section is designed with a large cabin door, which the engineers say is superior to the use of leading edge slots, and the wing contour is such that a smooth flow of air over the wingtip is provided, without the loss of lift which often results from the slots.

Other interesting features are:

A four-cylinder engine mount, structurally part of the fuselage, eliminating the conventional tail fin, and making the engine more accessible for repairs.

Hydraulic retractable landing gear with large nosewheel for rough fields. Nosewheel is steerable through 30 degrees. Main wheels have hydraulic brakes. Air-



North American Lightplane: Flight and landing pictures of North American Aviation's 151-P four-place Navion, announced as the company's entry in the personal plane market, show interesting design features, including: square wing tip and the 24-in. P-41 Mustang, engine mount built integrally as part of fuselage, position of rods, nutrunner, rating arrangement of wheels.

Narrow Data

Specifications and approximate performance data for the North American 151-P four-place all-metal Navion include:

Span—33 ft. 4 1/2 in.
Length—27 ft. 4 1/2 in.
Height—8 ft. 9 in.
Weight empty—2550 lbs.
Gross weight—3200 lbs.
Top speed—160 mph.
Cruising speed (75 pct power)—150 mph.
Landing speed (50 pct flap)—54 mph.
Takeoff distance (50 pct flap)—495 ft.
Landing distance (50 pct flap)—200 ft.
Rate of climb (best level)—720 fpm.
Max range (54 pct power)—700 miles.
Official performance figures await completion of CAA tests.

oil type shock struts are provided.
Full view windows, together with low-wing and tricycle gear, provides superior visibility. Reinforced shock absorbers, to give action to cabin. A high perimeter railing the enclosure in several positions, while a cylinder-type lock backs the enclosure at half closed position.
Flaps which may be locked hydro-mechanically in several positions.
Powerboost is a 165-hp Continental six-cylinder, horizontally opposed, air cooled engine. Production model will have a variable-pitch propeller. Magneto coupling is fitted with two large lugged down for easy maintenance access.
Cabin fittings include rubber floor-



"Navaho" Landing Gear: Detail of the tricycle retractable landing gear with steerable nosewheel of the North American Navaho is shown above. The gear retracts hydraulically, with spring auxiliary control provided to insure it in event of hydraulic failure. Navalized extends slightly from well when retracted, but main wheel retracts flush. A half-sprung tail skid provides a stopgap against damage.

ment in front compartment, and cupping on floor and lower sides of rear compartment. Luggage compartment behind rear seat is equipped with four drawers, straps, holds 32 lbs of baggage. When closed, top of luggage compartment doors shift for hats and small packages. Individual seat trays for all occupants are provided. Seats are upholstered cushions covered with Arlonex rubber. Cabin is ventilated.



Rooney Cabin: Foreviews of the four-place North American Navaho is shown in this closeup of the cabin, which has a width of 43 inches. Estimate is gained by sliding back the cockpit covers.

and oil leak, if desired. With pilot and three passengers, totaling 650 lbs, the plane will carry 55 lbs of luggage and full fuel load (40 gals of gasoline and 10 qts. of oil).

New Personal Plane Ferry Service Formed

Growth of a new vocation for ex-military pilots as ferry pilot for new personal aircraft is indicated with the second announcement of such an organization and the report that additional ferry services are being planned by other discharged Army and Navy pilots.

National Aircraft Ferrying Co., 111 Weyden Bank Bldg., Dayton, Ohio, headed by Robert H. Hartman, president, will operate in the same city, as the American Fly-

away Service Company, South Dayton Airport (Aviation News, Feb. 12).

■ Negotiations Under Way—Hartman reports his organization is now negotiating with two manufacturers for a ferry service from factories to drivers, and with additional contract experts to coordinate many of its flights as two-way trips, making possible rates virtually equal to those currently charged for new airplane deliveries.

Hartman formerly was an Army experimental aeronautical engineer and military pilot. All National pilots are company stockholders and veterans of the AAF and the Naval Air Force.

■ Pilot Checked Carefully—Pilots are required to sign a set of rules given up by the company, and covering cruising speed and other limitations on new airplanes, carrying of passengers and freight, supervision of aircraft on route, personal conduct of pilots and other items.

The company has instructed a system of fines for violations of its pilot rules, with bonuses for non-accident flying. No number of the pilot's group. Hartman reports, even has experienced a previous aircraft accident chargeable to pilot error.

■ Assume Responsibility—One of the company's contracts are expected to be with individual dealers and dealers. The flying company assumes responsibility for the plane when it accepts it at the factory, paying all expenses on route.

Wheelair To Have More Powerful Engine

Revised specifications of the Wheelair aircraft, patterned twin-engine, four-place personal plane, now designated Model 31-A, call for a larger engine and slightly higher speeds.

The plane is being built by Fugit Plastic Plastics, Inc., Tacoma, Wash. (Aviation News, Nov. 26, 1946), headed by James A. Edman, president, and Donald J. Wheeler, chief engineer. The design is one with which Wheelair won the preliminary award in a design contest conducted by a national magazine.

■ New Data—The revised specifications call for a four-cylinder engine, providing 170 hp, for takeoff at speeds a 120-mph engine, unpowered for the Wheelair Model 31 last November. Top speed of 138 mph, and 128 mph cruising speed are

quoted, with a landing speed of 33 mph.

■ Has Unusually Roomy Cabin—The plane is to provide accommodations for pilot, three passengers and 160 lbs. of baggage, with a roomy 32-in. wide cabin. Fixed tricycle landing gear with easily removable fairings, pilot's hood, and large flap, will be other features.

Engine Specifications

Specifications and performance for the two-place American Eagle, which has been licensed by CAA at Ft. Worth, Tex., and which will go into production soon at the American Eaglecraft Co. plant there, include the following:

Takeoff fully loaded—260 ft.
First minute climb—700 ft.
Cruising speed—55 mph.
Top speed—62 mph.
Landing speed—35 mph.
Cruising radius—225 miles.
Service ceiling—5,000 ft.
Weight empty—650 lbs.
Gross weight—1,000 lbs.
Span—33 ft., 4 in.
Length—23 ft., 6 in.
Height—7 ft., 1 in.
Wing area—144 sq. ft.
Engine—Continental 50 hp.

■ Plant Expansion Set—V. A. Holman, president, is expanding the factory by a 1,000 sq. ft. addition, with further expansion contemplated as demand for the plane increases.



CLEVELAND DOWNTOWN FIELD:

Within three years, Cleveland, Ohio, expects to have a 100-acre downtown airport built on filled land on its lakefront between East 120th and East 260th Avenues, as shown above. Construction is to be started as soon as contracts are let for a steel bulkhead to protect the 35 U. S. Army magazines and twelve 600-ton dredges, awaiting about 600,000 yards of fill a year for the project. The new field, for private planes and possible shuttle service, will be adjacent to the proposed \$5,000,000 Wash Street Pennsylvania Railroad station.



AMERICAN EAGLE:

The 50-hp. American Eagle, two-place open cockpit monoplane weighing only 620 lb. empty, is another revival of a pre-war experimental aircraft, its manufacturer, the American Eaglecraft Co., Ft. Worth, has announced. The plane, shown above, was developed experimentally in 1942 but was shelved due to war projects. The second and third planes are now in fabrication. Price of the plane will be around \$1,500. The Eagle has 24-ft. 6-in. wingspan, and is designed to land at 28-mph with 12-mph, cruising speed and 34-mph, top speed. Incorporated is a Continental 50-hp. engine. The plane has just completed its tests for a CAA approved type certificate.

Seaside AOPA Elects

Frederic R. Wood, Seaside, engineer for Boeing Aircraft Co., has been elected president of the AOPA Owners and Pilots Association at Seaside.

Edward DeWitt, publisher of the national magazine Fly Plane, was named vice-president, and Malcolm Dale, purchasing agent for Northwest Airlines, secretary-treasurer. Trustees are: Dean Spencer, James H. Campbell, H. William Blake, Dr. Herbert Hartley and Dr. Arthur H. Macomber.

Virginia Operators Map Organization

Thirty-two Virginia airport operators from the nation of an operators' organization which is being organized to represent interests of non-scheduled airlines and private flying in the state.

At a recent meeting at Richmond, five operators were named to a steering committee which will prepare a constitution and bylaws in preparation for later organization meeting. The group, which is considering the names of Virginia Airport Operators Association, Virginia Aviation Trades Association and Virginia Aviation Group, expects to be active in working with the state board of education in establishing approved aviation schools for training veterans.

■ Committee Members—The committee includes: Woody Edmonson, Lynchburg; John Curry, Richmond; T. E. (Doc) Price, Roanoke; Fred Graham, Staunton; Charles Barkley, Newport News; and Bob Ashburn, Alexandria.

Col. Johnson Resumes Duties as CAP Chief

Col. Buck Johnson returned last week to his duties as national commander of the Civil Air Patrol following a year's leave for aviation emergencies and work with war surplus properties. Col. Henry H. Blor, deputy commander, who has been acting commander, returns to the deputy post.

National office of Civil Air Patrol is at Balling Field, Washington, D. C.



NEW IDAHO DIRECTOR:

Chester Moffatt, Boise, (right) has been appointed state director of aeronautics for Idaho, succeeding A. A. Bennett (left) who resigned to become a Piper Cub and Globe Swift dealer in Boise. Howard M. Dahl, senior, assistant director under Bennett, also has resigned. Moffatt, former pilot for the Boise Statesman newspaper, was a flight instructor in Ted Rusk's army flight training school at Tullahoma, Calif., during the war and was CPT military coordinator for Idaho in 1942. He also is secretary of the Idaho Aviation Association.

Veterans Group Backs Pennsylvania Airpark

Organize to support development of Modern-Park project in face of protest from property owners.

Communitarian action in support of a proposed airpark near Malvern and Pottsville, Pa., is developing as the result of attitudes of 30 returned veterans who have formed the Veterans' Airpark Association.

The organization, which already has held two meetings is seeking to combat the opposition of a small group of property owners in the vicinity of the proposed field who have filed an order to prevent establishment of the airport, charging that it is a nuisance. A hearing is scheduled in June.

Book Flying Book—The veterans, most of whom were aviators before, seek to have the field established so that they may continue to fly, or may take further flight training.

W. S. Crader, Philadelphia businessman, who has leased the property, had planned to envision the field under management of a former Army flyer and a former Navy flyer. He has leased 228 acres, for two years, at a basis of \$100 a month for the first year, and \$150 a month for the second, with an option to purchase the land at \$800

Briefing For Private Flying

The trend toward installation of radio speakers in the cockpits of personal planes is taking hold rapidly. The new Bellanca four-place Chausseur 82, with 158-hp. engine, has a speaker installed in its radio dome and a radio antenna behind the baggage compartment inside the plane, although the emergency does not provide a complete radio installation at the plane's list price of \$5,355. The Stearman Vagabond 100, whose excellent sound-proofing radio installation was described earlier in these columns and the Cessna two-place Skylark 140, which is presently soundproofed, are other examples of the radio speaker. While it is not likely that changes will be made on models already out, it is probable that the radio speaker will be almost a universal arrangement in any personal airplane above the stripped-down utility plane class in the 1947 models.

GOODYEAR AMPHEAN—A second Goodyear amphibian, the GA-2, which will carry three persons, is powered by a 165-hp. Franklin engine, and is credited with a cruising speed of around 128 mph. now is flying. The GA-1 which had Stearns NX1222B, and was powered with a Franklin 125-hp. engine, was flown last year. ("Aviation News," March 12 and April 3, 1944.) At that time it was reported to be a preliminary experimental model which would probably be re-engineered for production. The GA-2, which has Stearns NX24221, presumably is the re-engineered production prototype. The Goodyear Aircraft division, Akron, Ohio, which made "Cactus" fighters and many other aircraft components during the war, remains check-mated about its new personal plane project, and it is definitely committed to production. Despite low horsepower, cruising speed of the Goodyear plane, if reported accurately by an official source, is somewhat higher than that of the Cessna/steeply Transmer amphibian, or the Republic "Seabee," the two personal plane amphibians in the lower price class now in production. The three-place Transmer has been quoted at 115 mph cruising speed with two 85-hp. engines, while the four-place "Seabee," with a 213-hp. engine, is quoted at around 100 mph, cruising speed.

STRATOPLANE ON SHELF—The Abrams post-war Stratoplane Explorer, announced about a year ago as in planning stage, has been shelved temporarily to await future development. Talbot Abrams, president of Abrams Aircraft Corp., Lansing, Mich., has declined. Meanwhile, the company continues with its aerial survey and mapping work and manufacturing of instruments and equipment for the service. The projected Stratoplane was designed as a check-out prototype cabin version of the two-tailboom pre-war Explorer photoplane plane and was to have been available either as a high altitude photoplane plane or as a five-place personal aircraft.

—Alexander McNamery

an acre at the end of the two years.

While the area is not now zoned, the protesting property owners, many of them owners of large estates in the area with a combined value of more than \$1,800,000, are seeking to have it zoned as another method of preventing the field's establishment.

Work Being Rushed—However Crader is preparing two temporary 1800-ft runways and expects to put the field in operation very soon, to demolish the zoning law, which under Pennsylvania law, cannot be retroactive.

Protests of the property owners are similar to those made in many other such cases, including one from a livestock breeder who complains about the distress caused to his thoroughbreds by noise of low-fly-

ing planes. Noise and awkwardness of airport operations are the basis of the principal protests, with demands for surrounding property also cited.

Two Other Fields Delayed—The proposed field is one of three which have been projected in the country and which are confronting property owner opposition. Establishment of the other two fields has been postponed pending the outcome of the Malvern-Pottsville case.

Officials of AOPA, of which Crader is a member, the Personal Aircraft Council and the CAA are watching closely the progress of the test case and are aiding the airport proponents.

Public opinion, except for the small group of property owners, is reported generally in favor of the field.

No Barriers in the Sky

—YET NEW FLOAT PLANES ARE GROUNDED

HERE'S WHY: when the war ended, we turned eagerly to our passionate job of producing aluminum alloy floats for personal planes. We placed substantial orders for materials, cleared sufficient space in our plants and were ready for increased production.

BUT MATERIALS ARE JUST TRICKLING IN. Our employees have been loyal. They have stayed on the job. Yet 20 years of experience in building floats means nothing when aluminum forgings, castings and extrusions are missing. One hold-up after another, in industries from steel to mining has held down production.

THIS MEANS you may be delayed in getting delivery of your Edo float, even though we have more than enough capacity to meet current demands.

BUT WE DO PROMISE YOU THIS: we are building floats to the limit of our material deliveries right now. And as fast as additional materials come in, we will add extra man-power to try to make up for lost time.

WAITING IS DIFFICULT, OF COURSE. But we assure you that when your Edo floats are delivered, they will be the finest floats the combined skills of Edo have ever produced.



HOW WE KEEP AN EYE
ON WHAT HAPPENS INSIDE YOUR ENGINE



The test engine into which this Standard engineer is peering may have a glass eye, but it certainly doesn't have a glass jaw—it takes a brutal beating.

Inside its combustion chamber we cause the severest detonation we can devise. Then, through a thick quartz plate in the cylinder head, we examine the combustion pattern to see just what makes a gasoline detonate. With the help of the microscope shown above on our "map" fuel combustion at any point for detailed study.

Many of the things we learned from the engine with the glass eye make Chevron Aviation Gasoline safer for engines, more dependable for private pilots, more economical for commercial flyers. Engineers for airlines by means of painstaking laboratory work like this, no wonder Chevron Aviation Gasoline is chosen to power test flights at Boeing, North American, Northrop and Lockheed.

Take a tip from the test-pilot, try Chevron Aviation Gasoline in your plane, too.

Two great products
of petroleum research



take better care
of your plane

CHEVRON NATIONAL CREDIT CARDS AVAILABLE for private flyers, good at airports throughout the United States and Canada. If you reside in the West, write Standard of California, 225 Bush Street, Room 1400, San Francisco, California—or ask the Standard dealer at your field for an application blank. **STANDARD OF CALIFORNIA.**

PRODUCTION

34 Aircraft, Equipment Companies Had 1.2% Average Profit in '44

Figure is exactly the same percentage as that shown in '43 for 32 manufacturers reporting, but total net rose from \$69,273,000 to \$112,434,000 on sales of \$9,112,252,000.

The average net profit after income taxes of 34 manufacturers of aircraft and aircraft equipment during the year 1944 amounted to 1.2 percent of sales, according to the survey of profits and operations of this industry group, among others, made public last week by the Securities and Exchange Commission.

This was exactly the same percentage shown in 1943 for the 32 companies which reported similar data to the commission for that year.

Cash Gains Increase—In terms of dollars, the 34 companies reporting in 1944 showed a net profit after taxes of \$112,434,000 from total combined sales of \$9,112,252,000, compared with \$69,273,000 out of total combined sales of \$6,002,576,089 for the 32 companies reporting in 1943.

An increase of net worth, however, the 1944 survey showed a net profit after taxes of 25.3 percent, compared with 33.9 percent for the 32 companies which reported in the preceding year.

Carlisle-Wright Corp., whose report included data for its subsidiary Wright Aeronautical Corp., showed combined sales totaling \$1,716,833,908 in 1944, compared with \$2,289,336,000 in the preceding year. Net income after income taxes in 1944 amounted to \$14,231,000, or 0.8 percent of sales. Net income as a percent of net worth, after income taxes, was 23.1 percent, compared with 20.1 percent in 1943.

Boeing Aircraft Co., Inc., reported total sales of \$2,003,491,000 in 1944, against \$2,731,811,000 in the preceding year. Net income after income taxes in 1944 amounted to \$7,863,900, or 0.7 percent of sales compared with \$8,832,800, or 0.6 percent of sales in 1943. Net profit after income taxes in 1944, as a percent of net worth amounted to

18.9 percent, against 13.6 percent in the preceding year.

Consolidated Vultee Aircraft Corp. reported total sales in 1944 of \$860,017,800, compared with \$768,344,000 in 1943. Net profit after income taxes in 1944 amounted to \$12,434,000, or 1.3 percent of sales, against \$11,197,900, or 1.5 percent in the previous year. As a percent of net worth, net income after income taxes amounted 40.4 and 50.3 in 1944 and 1943, respectively.

United Aircraft Corp. reported sales amounting \$7,432,187,900 in 1944 compared with \$7,974,879,000 in the preceding year. Net profit after income taxes in 1944 amounted to \$15,342,900, or 2.1 percent of sales, while in 1943 it amounted to \$15,

286,000; the percentage of sales also being 2.1 percent. As a percent of net worth, net income after taxes was 22.2 percent in 1944, compared with 24 percent in the previous year.

North American Aviation, Inc. listed total sales of \$813,043,000 in 1944, compared with \$63,684,000 in the preceding year. Net profit after income taxes in 1944 amounted to \$6,390,000, or 1.2 percent of sales, while in the previous year it amounted to \$6,790,000, or 1.5 percent of sales. As a percent of net worth, net income in 1944 was 27.9 percent, an against 35.2 percent in the preceding year.

Lockheed Aircraft Corp. reported total sales of \$602,412,600 in 1944, compared with \$464,801,000 in 1943. Net profit after income taxes in 1944 totaled \$15,332,000, or 2.5 percent of sales, compared with \$1,504,000 or 1.2 percent in the preceding year. Net profit after income taxes as a percent of net worth amounted to 32.1 percent in 1944 and 28.2 percent in 1943.

Boeing Airplane Co. listed total sales of \$887,062,000 for 1944, compared with \$603,116,000 in the previous year. Net profit after income taxes amounted to \$5,350,000, or 0.9 percent of sales, in 1944, compared with \$4,473,000, or a similar percentage of sales in the preceding year. Net profit after income



NEW SUPERSONIC ENGINE

Holding a model of a new jet engine which is designed to reach speeds up to 2,600 mph are R. T. De Vries, University of Southern California engineer, and R. E. Monroney, president of Monroney Aircraft Co., Van Nuys, Calif., and USC director of aeronautical research, whose company developed the engine. A Navy project, the model will be tested in the new Mark 25 wind tunnel now under construction at the Kaiser steel mill at Fontana, Calif. (Aviation News, March 11).

taxes as a percent of net worth in 1944 was 22.3 percent, as against 21 percent in 1943.

Glenn L. Martin Co. showed total sales of \$123,469,800 in 1944, compared with \$501,873,000 in the preceding year. Net profit after income taxes amounted to \$4,819,000, or 3.9 percent in 1944, compared with \$5,687,000, or 0.9 percent in 1943. Net profit after taxes as a percent of net worth was 17.2 percent in 1944 and 10.4 percent in the preceding year.

Lear Plans to Build More Home Radios

A substantial shift of production this year from aircraft radio and electro-mechanical equipment to home radios is indicated by Lear Inc., President William P. Lear's annual report for 1945 to stockholders.

Company expects to sell about \$5,000,000 or \$6,300,000 worth of home radios this year. At the end of 1944 it had the largest share of an inventory, \$918,476, tied up in this type. Aircraft radio inventory was \$250,000. Government radio contracts, \$390,000; new stock and electro-mechanical appliances \$945,000.

Financial Report — Lear's 1945 sales totaled \$11,558,179.60 with a net income of \$2,678,000.47. Income and excess profits taxes were \$1,621,000, leaving a net profit of \$957,104.47, equal to 8.3 cents per share on the outstanding common.

Franklin Now Producing Model 335 in Quantity

The new Franklin "335" engine now is in quantity production for Stinson and Bellanca. It will power the low-wing Bellanca Crusader and the high-wing Stinson Younger 126.

The six-cylinder opposed engine has 335-cu. in. displacement, produces 126 hp at 2800 rpm. Several new features have been incorporated in the engine, including a newly-designed piston aluminum cylinder with increased cooling surface—more than 3,500 sq. in. A special fuel-type carburetor has also been designed for the engine with several features new to the personal plane field. These include a built-in altitude control adjustable by the pilot from the instrument panel, an accelerator pump for quicker starting, and a carburetor idle circuit to insure positive stopping of the engine.



Lightweight Stalder: Construction of a new high-strength material being developed by engineers of the Chance Vought Aircraft division of United Aircraft Corp. The Stalder material is so light it can be easily handled by a girl.

New Aluminum-Balsa Laminate Developed

A new lightweight, high-strength construction material is being developed by engineers of Chance Vought Aircraft division of United Aircraft Corp. as an aid to the attainment of higher aircraft speeds. Named Stalder, the material is seen as reducing skin wrinkling in a monocoque and cutting down parasite drag because white panels can be fabricated with few corner reinforcements. Because of its great strength fewer internal supports and stiffeners are needed.

Details of Construction—It consists of two thin sheets of aluminum alloy with balsa wood core. The core and faces are bonded together under heat and pressure.

The material has proven successful in tests that a year's experience with its use in stabilizers for Chance Vought's PA-17 Corsair. The company now is designing new aircraft which will utilize Stalder to a greater degree.

Kellett Reports Orders Totalling \$3,355,335

Reaping of unfilled orders at Kellett Aircraft Corp. on Nov. 25 amounted to \$3,355,335 at which approximately \$500,000 represented

contracts with the Army Air Forces for experimental helicopter prototypes.

The helicopter remains the principal product of the company's present plans calling for a public demonstration of an important commercial helicopter program later this year.

Report — President Design-W. Wallace Kellett, president and the company has proposed promising designs for both large and small helicopter types in current design competitions, representing sales opportunities of several millions of dollars.

Kellett's \$2,800,000 in commercial work lies in diversified manufacturing fields including large quantities of refrigerators and deep-freeze units, coin machine parts, sheet metal tanks and cabinets, aircraft assemblies for Fairchild's C-62 Pioneer cargo plane, agricultural machinery parts, clippers, and electronic articles and substantial tooling and experimental orders.

Principal Customers Listed — Among the principal customers Kellett is serving are RCA Machine Tooling, Westinghouse, Celldur Corp., William Magazine Camera Co., Wilson Refrigerator, Jet Safety Car Heating and Lathing Co., Preston Corp., General Electric, New England Machine Co. and Aeron Manufacturing Corp.

Operations of Kellett during 1944 produced a net profit after taxes of \$211,161 or 31 cents per common share compared with \$149,800 or 33 cents per common share in 1944. Despite heavy amortization of war contracts in August and September sales last year were \$18,375,626. Net current assets increased during 1944 from \$154,081 to \$1,377,525 or 43 percent. Current assets at the year end were \$1,135,390 against \$1,065,714 at a dividend. Kellett's Company balance sheet showed \$715,587 in cash and U. S. Treasury securities.

Curtiss-Wright to Leave Buffalo in June or July

Curtiss-Wright Corp. will end its operations in Buffalo in June or July, the \$15,000,000 government-owned plant at the Buffalo airport having been sold to Westinghouse Electric Corp. C-W relinquishes plant operations rights on April 25 but has arranged with Westinghouse for office space until its termination work is completed. The company's operations will be centered at Chubbuck, Ohio.

THE NEW

STROMBERG

P S SERIES INJECTION CARBURETOR



protects light planes from the hazards of carburetor ice



Many hours of testing both in the laboratory and in flight prove that Stromberg PS Series carburetors are designed to eliminate the hazard of carburetor ice.

In this type carburetor the point of fuel discharge is not within the carburetor itself as in float-feed carburetors; instead fuel is discharged into the air stream as it leaves the carburetor and enters the engine manifold. In this way an atomization from the ringling effect of fuel vaporization is eliminated.

In addition, Stromberg's PS carburetors give the light plane all the other advantages of injection carburetors: small, no moving equipment, constructed as simply as the outstanding performance of afloat carburetor during the war. Stromberg PS Series Injection carburetors are made in a number of sizes to cover the range of 50 H.P. to 300 H.P. engines.

Whether you are an airplane owner or manufacturer, specify Stromberg PS Carburetors for your new plane.

See us at...

Bendix

PRODUCTS DIVISION

Bendix Aviation Corporation, South Bend 30, Ind.



Brodie to Produce 'Clothesline Airstrips'

Capt. James H. Brodie, inventor of the "clothesline airstrip" — the Brodie system for landing small airplanes on an overhead cable — is preparing to produce a commercial version of the apparatus at Baltimore.

Brodie and his test pilot, Raymond A. Gregory, have applied for a Maryland charter in the name of Brodie Engineering Corp., of Baltimore, and are completing arrangements for the production of the commercial "aerial runways" at the plant of Maryland Engineering Co., Pikesville, where the AAP Brodie systems were made. Brodie hopes the first commercial system will be ready for delivery in about four months.

Prospective Uses—Principal commercial use for the apparatus is expected to be for air taxi services. Most engineers expect it will be several years before suitable adaptations will be available for such a service between central business districts and suburbs, Brodie expects to bridge this gap with his new runway.

As used by the Army the Brodie system was designed to permit landing and takeoff of small liaison type planes of about 2,000 pounds

gross weight, from a 300-ft steel wire suspended between masts 60 ft high by hooking onto a trailer.

Cable Outlined — The Army-size Brodie system cost approximately \$4,500. A larger system capable of handling planes up to 7,500 lbs. gross weight (including virtually all single-engine civil planes), would cost about \$11,000.

Brodie sees possibilities for still larger systems which could handle twin-engine transports as large as the Douglas DC-3, but which would require larger derrick cabins and strongly built towers, of greater height. Such an installation might cost from \$80,000 to \$75,000.

Technique Called Key—In civilian firms who question their ability to land and takeoff on the aerial runway, Brodie points to a statement in an Army installation manual, which says: "Any pilot capable of handling a plane in normal flight over land and takeoff from the rig with a minimum of training."

Brodie says a pilot yet has been hurt in a cable landing or takeoff.

Continental Diesel Has Unique Feature

Continental Motors Corp., makers of several models of aircraft engines, will begin production the month of a new line of diesel en-



Smooth Stroke. Courtesy of new diesel combustion chamber developed by Continental Motors Corp. Expanding gases from "Dynamo-cell" (A), an auxiliary combustion chamber, feed back into the main combustion chamber (B), prolonging the power impulse. Fuel injection nozzle is seen at (C).

gines for industrial and non-aviation transportation use, president C. J. Boone announces.

Five models will comprise the Detroit firm's initial diesel offering: the engines ranging from 25 to 150 hp. Many parts will be interchangeable with parts of the company's gasoline engines.

Dynamo-Cell Novel—In a departure from conventional design, Continental diesels will contain a small auxiliary combustion chamber opposite the fuel injection nozzle. Called a "Dynamo-cell," purpose of this chamber is to provide a smoother piston stroke. Part of the amount of fuel from the injection nozzle explodes immediately in the combustion chamber; the remainder of the fuel ignites in the Dynamo-cell and the gas from this explosion feeds back into the main chamber to furnish more constant power to the piston throughout its stroke.

Breco Officers Renamed

Direction of Breco Corp., the very successfully directed at the annual stockholders meeting and installed all officers. They are: John T. Blumstein, president; Joseph P. Lucas, vice-president; Fred G. Shaggy, treasurer; David T. Wenta, chairman of the board which consists of Louis Katz and Frank C. Mandel, president of the First Jersey Corp. and Robert B. Reynolds, president of Federal Laboratories, Inc. Herbert J. Dwyer was selected secretary.



The man of the house has his mind in the air

Straight thinking, practical, full of common sense, the average American male has high-flying ideas today — plans of owning his private plane, estimates of its features, costs and advantages. He wants to be told about the new planes — but in his own language. He wants to understand this new aircraft — but in his own terms. He's still talking about childhoods, for example, not instrument panels.

That's why *True's* new "Plane of the Month" article is so popular with *True's* readers. There they find clearly stated, authoritative facts about planes on the market now. They first Maple Donald E. Kayton, the co-owner pilot who is now *True's* Aviation Editor — he knows flying, he knows planes, he reports his personal experience with the featured Plane of the Month. This is only one of the reasons aviation is a million uses a month long.

THE MAN'S MAGAZINE
True

Sells men for you

FAVORITE PUBLICATIONS, INC.
370 Madison Avenue
New York 17, N. Y.
World's Largest Publisher of Men's Magazines



HOUSING PROBLEM ANSWER?

Breck Arrowood Corp. expects to be building 200 of these houses a day soon after the start of 1947, according to Vernon Wolf, president of Fuller House, Inc., which will market the dwelling designed by R. Buckminster Fuller who proposed the old Dymaxion house (AVIATION NEWS, March 23). The houses will be constructed in construction firms which will combine enough technology with state-of-the-art production methods. Wolf and Fuller see the new dwelling, which will sell for \$20,000 erected, as the answer to the current housing problem. City building codes are the big impediment in preventing the success of this dwelling.



A B & H Development ★ PRE-SHAPED SPRING WIRE

■ The development of a method for low cost, volume production of precision locking rings etc. was the *Bender and Hart* answer to a desperate need for parts for a strengthening expansion of surplus engines. Existing methods of ring making were not practical from a raw material, manpower or machine tool standpoint.

Today you can take advantage of the B & H method of ring production that has not only proved sound from an engineering and metallurgical standpoint but a method that will give you the type of ring to meet your specific conditions accurately, in quantity, and with a big saving of material and cost.

OUR NEW BOOKLET

gives complete details on the type and range design and shows the modern equipment B & H has available to meet your needs and saving needs. Send for a copy today.

Rings are available for any diameter bore or shaft and in practically any steel or alloy.



Canadian Surplus Put To Many Unique Uses

Many new uses for aircraft parts are being found to bring a return to the Canadian government for wartime made equipment through Canadian War Assets Corp.

Aircraft generators, for example, which were charged batteries for heavy bombers now are supplying electric power on Canadian farms. About 108 of these generators have been sold to a company of air force and army veterans. Aircraft mechanical delivery Co., Ltd., St. Louis, Mo., sold to Aircraft Supply Co., Toronto. The generators are now used to supply 116 volts amperes at the 24 volts for which they were designed. They are operated by 15 hp. gas or engine.

Other Unique Uses—Other surplus aircraft parts in demand are wing fuel tanks for conversion into water storage and domestic fuel oil tanks, aircraft control cables for use as guy wires for tower, steering controls on motor boats, and far too many others. These items are being used by an organization for use by prospectors and amateur surveyors and also for use by veterans.

Miles Aircraft Building Two-Engine Messenger

A two-engine version of the Messenger, single-engine low-wing monoplane, has been put into production by Miles Aircraft, Ltd. The craft powered by two Blackburn Cirrus Minor II two-cylinder engines can take off in only 159 yds against a 5 mph wind and climb to 50 ft. in 310 yds at an all-up weight of 2,868 lbs. At the same weight it has a top speed of 158 mph, and cruises at 130 mph.

Structurally the single-engine Messenger needed few alterations to convert it into the two-engine version. Basically, the wings, fuselage and tail used in the new plane are almost identical with those of its predecessor. The Messenger was equipped with a fixed landing gear, while the Genesis has a retractable undercarriage, the latter and which being drawn up into the upper section of the engine nacelles.

Packard Working On Jets

Packard Motor Car Co. is experimenting with jet propulsion aircraft engines for the AAF at its new Van Airway Air Base and at the company's plant in Toledo, Ohio. President George T. Christopher, reveals in his annual report

PERSONNEL

Van Horn to Direct BNF Maintenance, Engineering

Ray H. Van Horn (photo) has been appointed director of maintenance and engineering of Boeing Air Force Base, Wash., D.C. Van Horn is a newly created position. He will supervise the maintenance, maintenance engineering and construction departments of the base. He is a former engineer, and H. B. Duggan, superintendent of construction, will continue in their present capacities. Van Horn received his undergraduate degree from the University of California at Berkeley and later joined Van Horn Corp., where he has been employed in engineering and research.

Other personnel changes include the appointment of H. B. Duggan, superintendent of construction, to the position of chief of the base's construction department. Van Horn is a former engineer, and H. B. Duggan, superintendent of construction, will continue in their present capacities.

Walker H. Johnson, Jr. (photo) has been appointed eastern regional office manager for American Airlines System with headquarters in New York, replacing Robert K. Wagner, who has been appointed general manager of the company's New York City office. Johnson is a former pilot and has been employed in the airline industry for many years. He is a graduate of the University of California at Berkeley and has a master's degree in aviation. He is currently employed as a regional manager for the airline industry.

Capt. Richard A. Harding, an aviator, recently joined the New York office of Alaska Airlines, Inc. He is a graduate of the University of California at Berkeley and has a master's degree in aviation. He is currently employed as a regional manager for the airline industry.

L. G. Greenlee (photo), wartime salary personnel manager for Goodrich Aircraft Corp., has been named director of personnel for the company's New York City office. He is a former pilot and has been employed in the airline industry for many years. He is a graduate of the University of California at Berkeley and has a master's degree in aviation. He is currently employed as a regional manager for the airline industry.

G. Jones, formerly head of the labor personnel department,

Artis H. Shadfield has been appointed superintendent of the CAA's Air Navigation Facilities, Post and Structures Branch in the Rock. Shadfield formerly was assistant chief of the Airways Engineering Division at headquarters. Other CAA appointments include several other appointments. Col. Edgar B. Franklin, former chief of the Airfield Air Control Division, Canada, has been appointed chief of the Section, Post Design, Air Force Service, Maj. William J. Ferris is chief of the Maintenance Inspection Division, Aircraft and Components Service, and Col. Charles F. Taylor is former chief of the Instrument Approach Program Section.

Franklin F. Vennart has resigned as chief of the Air Transport Command's maintenance division, as manager of the re-activated maintenance division with headquarters in Chicago. Eugene M. Campbell has returned from military service and has been appointed New York City sales representative. Albert F. White has been released from the Office Air Force and been appointed city manager for the office at Buffalo. Another representative who has returned to Eastern is J. J. Refrager who has been named a New York City sales representative. W. B. Hensley, Jr., formerly district manager in St. Louis, has been appointed to Alaska according to John M. Lyman who recently left the office. E. K. Hensley has been released from the Office Air Force and has been appointed as manager of special events in the sales department.

Alvin Sherr, formerly at the Naval Reserve, recently joined the New York office of Alaska Airlines, Inc. He is a graduate of the University of California at Berkeley and has a master's degree in aviation. He is currently employed as a regional manager for the airline industry.

Tourism nationally-known aviation leaders who are reported in various articles. The Harvard University Graduate School of Business Administration will continue work in its industry committee in the aviation industry. The committee is headed by William A. M. Butler, assistant secretary of the industry committee. Other members include: Ralph S. Dumas, Frank F. Hensley, Robert E. Green, George P. Baker, William F. Hensley, John A. Hensley, Albert F. Hensley, Victor Hensley, Alfred Hensley, Joseph Gaudin, H. Hensley, Edward Hensley and C. Hensley.

Shirley D. Salt has been appointed purchasing agent for Air Cargo Transport Corp., Newark, N. J.



NEW AAA DIRECTOR:

Lt. Col. A. Fehr, Jr., has been elected to the board of directors of All American Aviation, a recently organized company by his brother, the late Richard A. Fehr. Col. Fehr, who served in the Air Transport Command, was vice-president of AAA and a member of the board since 1942 when he returned to enter the AAF.

Frederick Nichols has been named vice-president and group executive of Pacific Aviation Corp. and will be in charge of the Pacific division and West Coast Division, a new division formed in the West Coast sales and service for civilian divisions.



H. van der Grint has been appointed general purchasing agent for TACA Airways with headquarters in Miami. He is an aviator and manager of aircraft freight loading and cargo loading facilities. William J. Ferris, a Navy veteran, formerly was with Transcontinental & Western Air, Inc.

Charles E. Sorber has been elected president and general manager of Pearl Products Corp., of Barchart, Mo. He formerly was vice-president and assistant to the president of the company.



William J. Ferris has been appointed purchasing agent for Air Cargo Transport Corp., Newark, N. J.

Tomorrow's Leaders are Training Today



THE most and brightest of the American farmer—tomorrow's farmers—are training for their future as nation-builders on very other lands in the land.

One of the 4 thousand of the 6,000,000 American farmers and ranchers who are training for their future as nation-builders on very other lands in the land. They study business, they study agriculture, they study the science of the soil, they study the science of the farm, they study the science of the nation. They study the science of the nation, they study the science of the nation, they study the science of the nation.

Country Gentleman considers it a part of its purpose to report on the progress of the nation's farmers, to report on the progress of the nation's farmers, to report on the progress of the nation's farmers.

Country Gentleman's attention to tomorrow's farmers, to tomorrow's farmers, to tomorrow's farmers, to tomorrow's farmers, to tomorrow's farmers.

Country Gentleman
NATIONAL SPOKESMAN FOR AGRICULTURE
A CURTIS PUBLICATION

top-half farm . . . the farm with over 400 acres of the national farm income.

Facts of Special Interest to the Aviation Industry

Survey shows 60% of general planes will be sold to residents of rural areas.

In Kansas 62% of all 10,000 farm families listed in buy plans as against only 19% out of 10,000 city families.

Small families own on general terms—general and common 60% of all American produce.

Former's income has doubled in the last five years.

Country Gentleman's readers are concentrated among the top half farm families.

SPECIAL AIR SERVICES

CHARTER NON-SCHEDULED INTRASTATE

Texas Air Lines, New To Field, Serves About 50 Communities

In business little more than three months, firm operates 35 Cessna and has 20 Beechcrafts on order; reported already "in the black," it has cut rates to 6 cents a mile.

In little more than three months a newcomer to the federally-authorized air transport field, Texas Air Lines, operating daily schedules, has built what is probably the most extensive intrastate air network in the country.

Serving about 50 communities and flying at a rate of more than 2,000,000 airplane miles annually, the company claims it already is operating in the black, and has made its first passenger fare reduction to six cents a mile.

Offer to Carry Mail Free.—Officials have told Post Office Department and CAB authorities in Washington that they will carry mail free, at or not, on any route in the state, in accordance with much mail can be procured at best points and recently filed application with CAB for a certificate which would permit it to carry mail.

Civilly R. Kewin, owner of TAL, expects shortly to turn a delivery cooperative with a capitalization of \$300,000. He entered aviation in 1944 as operator of Cunningham Airport at Houston.

An president of Kewin-Norman Co., Kewin took over Cunningham Airport primarily to a repair and maintenance base. With the property well beyond the surplus of surplus planes and Kewin moved the flight training, charter work and light freight carrying fields. As the charter work swelled in volume and demand more aircraft, it finally was dissolved from Kewin-Norman Co.

Begin Operating In January.—Texas Air Lines began operating Jan. 11, 1946. It now has 39 two-passenger UC-78 Cessnas. The company has on order 30 Beechcraft D55-C eight-passenger planes, two of which are to be delivered in either April or May. The balance of the order is slated for September delivery.

On an initial fare of 6.25 cents a mile, TAL had developed a load factor of 75 percent before lowering the fare on March 15. Kewin confidently expects the load factor to be increased with the reduced rate and the new equipment.

Plan Law Operating Costs.—With the Beechcrafts, he expects his direct operating cost to be just over 20 cents per airplane mile. This figure, lower than that at which most intrastate operators are ex-

isting, is due largely to a dual engine under which gas will cost 3.0 cents a gallon after state tax refund, and oil 42 cents a gallon.

TAL began operation in the eastern part of the state, flying from Houston to Galveston, Brownsville, Dallas and Fort Worth. Now, either already operating, or shortly to be put into service, are routes which link the eastern and western, and the northern and southern boundaries.

Basic Data Given.—Average distance between stops is from 75 to 100 miles, with the longest city being served—Houston—having a population of 413,800, and the smallest—Alpine—having a population of 3,000.

In all, 12 routes are operated: Houston to Brownsville via Victoria and Corpus Christi; Brownsville to Laredo, Houston to Fort Worth via Bryan, Temple, Waco and Dallas; Fort Worth to Houston via Dallas, Comanche and Palestine; Houston to Texas City via Livingston, LaFayette, Nacogdoches, Lufkin and Marshall; Brownsville to Aransas via Laredo, Eagle Pass, Del Rio, San Antonio, Big Springs, Lubbock and Pharrsville, Houston to Galveston.



Intrastate Network. Texas Air Lines expects to have in operation by April 15 all the routes shown in dotted lines on the above map, as well as those in solid lines which it is already flying. Company's schedule of routes is as fast as possible. When all scheduled planes are completed, TAL is expected to have the nation's largest intrastate air network, serving nearly 50 communities and flying more than 2,000,000 airplane miles annually.



BRITAIN'S NEWEST AIRLINER

The Avon Tudor II, Britain's newest and largest airliner, has completed its first flight successfully at Woodford Aerodrome, Cheshire, England. The huge transport was airborne after a half-mile run. Four Rolls-Royce 2,270-hp engines give it a 268-300 mph maximum cruising speed and a 325-mph top speed. Wing span is 120 ft, length is 145 ft 2 in, height 44 ft 3 in. The fuselage is 26 ft in diameter, will seat 48 passengers or handle some 500 tons of cargo in its 4,000 cu. ft.

parliament has decided on a pattern for mail carriage consistent with the economical use of all forms of transportation, learned the practicality of helicopter operation, and decided whether additional highway post office lines shall be established.

In suggesting ship cuts in foreign airmail postage, Salazar proposed a study to find efforts at setting the same rates for transporting mail from foreign countries as paid by the country to U. S. international carriers. This likely would reduce applications by foreign carriers for air routes to this country, and result in more mail by U. S. lines. Exchange agreements under which this country would send part of its mail by foreign air carriers of their country and U. S. carriers "open the door" to keep costs down and efficiency up, the report averred.

New Unit May Supersede ATA Operations Committee

Expanding airline operations activities have led to plans for the creation of a new Airline Operations Conference as a forerunner of the Air Transport Association. The new group would take over the functions of the ATA Operations Committee. Jurisdiction would be related to operations problems as well as members with joint and co-ordinated action.

Heading formation of the new body, furnished at length and favorably at a recent operations committee meeting in Chicago, a steering committee has been formed of which K. R. Ferguson of Northwest Airlines head of the operations committee, is chairman. Members are L. G. Pike of American, George R. Cushing of Delta,

M. H. Anderson of Northeast and J. A. Herby of United.

• Hear Report — Operational vice-presidents of the airlines heard a progress report at their Chicago meeting on the new Air Transportation-Traffic Council program (AVIATION NEWS, Feb. 4). Announcement has been made that William E. Rhoades, who recently returned to United Air Lines after being personnel pilot for Gen MacArthur, will become director of ATTC April 1.

Government-Owned Line Pressed by Australia

The Australian Government has advised immediate preparations for a Commonwealth-owned air service despite an Australian High Court decision that in effect declared invalid the Commonwealth's legislation to nationalize Australian airlines.

• Will Compete With Private Lines — The new service will compete with privately-owned airways, following the court's ruling that the government could not enforce a monopoly. Prime Minister Joseph B. Chifley announced that a commission of five would manage the government service.

Intervenor Right Widened

Chambers of Commerce and civic organizations of similar character will be permitted in the future to intervene as parties in route cases and other formal proceedings before CAB. In the past such groups have been permitted to attend hearings and present evidence relevant to issues under consideration but have not been able to qualify as intervenors in their own rights.

Ocean Service Plans Announced By British

Plans to inaugurate London-New York flights around July 1, and details of a new trans-Pacific service, were announced recently by British civil aviation officials.

The trans-Atlantic route will be flown with five Constellation's now on order, and BOAC officials hope to double the service in a frequency of one round-trip daily. Flights probably will stop at Gander and Shannon.

• Pacific Plans Revealed — Two round-trips weekly are contemplated on the Pacific route by British Commonwealth Pacific Air Lines, a joint Australian-New Zealand-United Kingdom company, as soon as equipment is available. The projected route originates at Auckland, N. Z., and Sydney, Australia, touches the Fiji Islands, Canton Island, Honolulu and San Francisco, and terminates at Vancouver, B. C.

• Outline new services:

Trans-Canada. March 30 agreement schedules between Montreal and the United Kingdom in four round trips weekly.

Unilever. The April 25 will inaugurate daily scheduled service: Washington and Montreal and Ottawa, Canada, on weekly-outgoing AM to add TUP via Toronto. Ending and returning scheduled stops at Montreal, Vancouver and Honolulu. In 1947, a scheduled London-Toronto P. will be added on some schedules when adequate facilities are available on these stages.

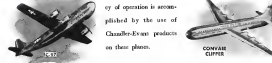
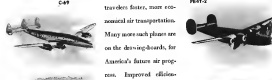
Wendover. May 1947 start scheduled service today on AM 48 between Detroit and Los Angeles. Scheduled flights will be limited to 82nd AM. The service has been expanded to provide for flying the highest aircraft in the country, which means maximum speeds are 14,000 ft. The DC-6B which will start the operation of scheduled service. The DC-6B service to stop between Port Worth and Atlanta.

NAL, IAM Sign Contract

National Airlines has assumed administration of a contract, retroactive to Jan. 1, with the International Association of Machinists, providing a 44-hr. week, pay rates, overtime, and other conditions for mechanics, stock and commissary employees.

N.Y.C. Air Express Soars

A 21 percent gain in air express shipments at New York City in February over the same month last year has been noted by Air Express Division of Bellway Express Agency. Among the 69,936 shipments were machinery, various tubes, style goods and suit clovers.



WINNERS

Some of these airplanes

helped win the war . . .

others are keeping the

peace, and giving world

travelers faster, more econ-

omical air transportation.

Many more such planes are

on the drawing-boards, for

America's future air prog-

ress. Improved efficien-

cy of operation is accom-

plished by the use of

Chandler-Evans products

on these planes.

More chance did not install Chandler-Evans equipment on all these headlamps. And Chandler-Evans' research, engineering and production will continue in order to provide carburetors and fuel pumps for tomorrow's winners.

CARBURETORS FUEL PUMPS FROTHER-PLUGS
CHANDLER-EVANS CORPORATION
WEST HARTFORD 1, CONNECTICUT, U. S. A.



load with highway work, usually at night, and parking on private property, highway stations, and other places.

●Bulls—City authorities are studying proposals for long-term removal of the buses and equipment of loading American Airlines' DC-3s from the city streets. The city is considering paying daily to use them. DC-3s are expected to be used by July 1. The city is also considering a rate of \$100 each for the first two days and \$50 each for the next two days. The city is also considering a rate of \$100 each for the first two days and \$50 each for the next two days. The city is also considering a rate of \$100 each for the first two days and \$50 each for the next two days.

●Nations Talk—American Airlines has announced plans to use the airport as an alternate field for its DC-3s. It is talking to the city by the airport. It is talking to the city by the airport. It is talking to the city by the airport. It is talking to the city by the airport. It is talking to the city by the airport.

●French High Landing—By its use Lockheed approaches the Constellation in either a very-long-range airplane, without the "Pak" as a short-range high-load capacity aircraft using the cargo-carrying equipment.

Company officials estimate that the average use of the new cargo blower will be about the Constellation's payload of 3,800 lbs. They estimate that while it is capable of carrying 3,800 lbs. of high-density cargo, the average cargo in a volume base will weigh slightly less than half that amount.

●Used In Re-Use—The "Pak" apparently is the first American development of this type for transport use, although the British have been using similar equipment to increase the cargo-carrying capacity of bombers converted to civilian use.

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Constellation Cargo Blister Developed

Lockheed Aircraft Corp. today will begin advertising the Constellation as a "two in one" transport blower by the development of an attachable cargo blower (trade-named "Speed Pak") capable of carrying an additional 3,800 lbs. of baggage or freight.

The "Speed Pak" which can be loaded in an air transport freight shed and then lowered on its own wheels into position beneath the Constellation, can be cable-raised to the underside of the fuselage and lowered into position for flight in two minutes. TWA is expected to make initial use of it in the near future on its routes to London.

●French High Landing—By its use Lockheed approaches the Constellation in either a very-long-range

reagent to CAA's request for comments on the new regulations which affect certification of basic operators and engineers as well as flight navigators. Developed in 1945 in collaboration with industry groups, the standards parallel recommendations by U. S. delegates to the Provisional International Civil Aviation Organization.

The three new certificates currently are: commercial pilot, which apply only to U. S. carriers engaged in international service. They provide, however, to become increasingly important to show competence of employees of larger transport and authorities of long-range flights may soon require additional flight crew members in domestic operations, CAA states.

North Atlantic Conference Subcommittee to Meet

The working subcommittee of IATA's North Atlantic Traffic Conference, which met in New York to organize its study of an operating route for when more permanent than those tentatively proposed by the Conference last month (Aviation News, March 11).

That report is to be completed by the next Conference meeting June 3 in New York. Subcommittee members are Chairman H. G. Ferguson, Pan American; Secretary J. H. Smith, American Overseas; T. J. Hayward, Trans-Canada Air Lines; Nils Edmonds, NACA (Aberdeen, Alaska); Nelson Latham, Air France; M. W. McQuinn, TWA; and J. B. Smith, BOAC (E. J. Walcott, alternate).

Western Contracts For 20 Model 240's

Agreements, calling for first delivery in June '57, includes option for 30 more.

By SCHEPHER BANGS

Western Air Lines has selected Consolidated Value Aircraft Corp.'s bi-engine turboprop Model 240 to replace the company's existing fleet of DC-3 transports.

A \$4,800,000 firm contract for 20 planes, the first to be delivered in June, 1957, was signed between Western and Consolidated, and an option given for the purchase of an additional 30. The option must be exercised by Western by the end of 1946 for consolidation into a firm order.

●Also Ordered—McC-45—Western previously placed a firm order with Douglas Aircraft Co. for 10 DC-4 transports, to cost \$3,300,000. Deliveries of this model also are to commence in June. The new planes will be delivered before the Western-Consolidated contract was signed. Western received word from its chief underwriter, Transamerica National Bank of Philadelphia, that the full purchase price for the Western planes would be available immediately if needed. Actually, an initial check of \$173,500 from Western satisfied Consolidated.

●Payees Banking Faith—While Transamerica will divide its financial responsibility to an unprecedented extent with other banks, as yet unnamed, its readiness to back the venture with equipment mortgages is security may be considered evidence of banking faith in both the future of the western air carrier and the still un-built planes for which it has contracted.

To Consolidated, the Western contract will be not only a strengthening of its beneficial transportation commercial transport manufacturing position, but will influence the validity of its original sale of 240 Model 240 transports to American Airlines.

●New Flights In Area Case—The Western contract undoubtedly will be used effectively in an effort to show CAA that while the Model 240 has not yet been flown, or even built, it is far more than an airplane of paper specifications, as were left CAA evident in its order to American and Consolidated to show some why the Transamerica-Corporation contract should not be voided by means of the underwriting stock price advance of the two companies with American Corp.



Reservation Control Board. This master control board is used on a "teletype" system by American Airlines at Boston to expedite the handling of reservations. The machine automatically answers requests for space from reservation agents. Photographs are received when a specific flight is booked, and indicate on agent's board (below).

Reservations Data Machine Used By AA

An automatic, electric "teletype" to speed the handling of reservations requests is being used by American Airlines at Boston, one of the busiest reservation stations on the carrier's system.

Invented by E. W. King, American's manager of reservations and brief offices, the device consists of a master control board connected with small electrical "interceptors" at reservation desks.

●Agents Deal For Information—The control board, graphed by flight numbers and dates, keeps track of flight bookings through information from counter-control personnel. Face of the board contains spaces which are grouped as specific flights are booked.

Agents at the reservation table, on receipt of a request for space on a particular flight, "quote" the control board by pressing keys for the date and trip number as the "interceptor," whose keyboard resembles that of an adding machine.

The request is transmitted by a selector and position indicator which is similar to those in dial telephone operation and the answer returns in a flash of a second. Light is visible. Light at the top of the agent's keyboard gives the answer.



Interceptor. Under the automatic system of handling reservations American has installed at Boston, the agent receives a request for space, pushes the proper keys on the machine and receives information from a central control board in a flash of a second on whether it is available. Light at the top of the agent's keyboard gives the answer.

where the machine went into service when American's reservations personnel was moved from Logan International Airport to a new office at 140 Federal St. The machine gives answers on Boston-New York and Boston-Washington flights for the current date and 16 days ahead. Capacity of the instrument, which was built for American by The Register Co. of New York, is 850 flights.

Government And Industry Agree On Research Policy

It would be difficult to over-emphasize the importance of the national aeronautical research policy announced today by the National Advisory Committee for Aeronautics with the approval of the Army and Navy air services, CAA, and the aircraft industry. For the first time this puts all the organizations concerned in aeronautical research on a sound and mutually agreeable basis of cooperation through a definition of spheres of activity.

Adoption of this policy ends certain misunderstandings among aviation groups and furnishes much-needed guidance to Congress in its steps toward an enactment of an overall national air policy.

But more important, it provides what appears to be the best instrumentality for keeping this country's military, civil and commercial aviation ahead of that of any other country. All concerned deserve praise for their recognition of what has been a weakness in our aeronautical teamwork and their common-sense approach to a solution.

The preamble to the NACA statement points out that accelerated aviation research and development created an opportunity for aggression which was promptly exploited. "This issue is the most expensive we ever had to learn. We must make certain that we do not forget it."

As a result of wartime research in this country by NACA, the Army, the Navy and the industry, it is asserted, American airplanes are today superior in most respects. Now, however, this lead is endangered. "We already are informed of extremely ambitious plans to surpass present American research equipment, already in a degree as well as the air."

As a protection, NACA believes it to be in the public interest to insure a greatly increased civil use of the airplane. "A vigorous civil aviation can offset disastrously our domestic and international reliance both economic and cultural. At the same time it will contribute to national security by the support of a reserve of airplane; operating, development and manufacturing facilities and civilians trained in the skills which are critical in time of war."

The key to the achievement of this goal is research to solve the many problems hindering the path of greater use of the airplane. Therefore, the policy recommends that the Army Air Forces, the Bureau of Aeronautics of the Navy Department, the Civil Aeronautics Board and the Civil Aeronautics Administration of the Department of Commerce, and the NACA conform, in so far as may be practicable, to the following general policy considerations in the past-year utilization of research, experimental and testing facilities of the government and their relation to the development facilities of the aircraft industry.

(A) Fundamental research in the aeronautical sciences is the principal objective of the NACA. Such research is directed toward the solution of the prob-

lems of flight and results are promptly published.

(B) Research of the NACA is not considered completed until results are tested by sufficient practical application. However, NACA research will not include the development of specific aircraft or equipment.

(C) Research progress of the NACA is formulated in close collaboration with technical personnel from the government agencies concerned and from industry through membership on appropriate subcommittees.

(D) The research facilities of the NACA may be used on request by a government agency in evaluation of specific aircraft and equipment, whenever facilities available to that agency are inadequate.

(E) The research facilities of the NACA laboratory may be used to some extent by individuals and corporations, provided that the investigation is considered by the NACA to be worth making.

(F) Application of research results in the design and development of improved aircraft and equipment, both civil and military, is the function of the industry, assisted as may be necessary by facilities for experimental studies, placed in a manner to stimulate competition for quality. It is recognized that the encouragement of competitive engineering enterprises is essential.

(G) The evaluation of military aircraft and equipment developed by the industry and the exploration of possible military applications of research results are considered to be the function of the Army and Navy.

(H) Exploitation of the practical use in civil aeronautics of newly-developed aircraft and equipment, in so far as government assistance may be necessary, is referred to be the function of the Civil Aeronautics Administration.

(I) The NACA reversely will use its own research facilities, but will contract with university and other private research organizations for work in special fields. Likewise, other government research centers will be used by the NACA whenever practicable.

(J) Unnecessary duplication of facilities and effort will be avoided by reference to the principles stated above, but for important problems where practical solution appears to be especially difficult, parallel attacks by several independent research teams are necessary. Such parallel attacks must be coordinated, and it is the policy of the NACA to achieve such coordination through the medium of subcommittees of experts representing all concerned.

The aircraft industry's endorsement of the NACA policy was made by J. M. Kindelberger, president of North American Aviation, Inc., who is chairman of NACA's industry consulting committee.

ROBERT H. WOOD

STIRRING *Diary* OF AN AIRLINE

First and only airline to span 20 years of continuous operation, Western Air Lines, on April 17, celebrates two decades of service to the American traveler and shipper. Western Air's pioneering is the story of air transportation. Here are a few highlights.



1936: The first passenger service on scheduled air mail routes was inaugurated between Salt Lake City and Los Angeles on May 25.



1938: Western Air placed the nation's first mail express planes in San Angeles-New Francisco service.



1939: The "five man analysis" system of wind tunnel testing was developed for engine evaluation. Added to safety and comfort of passengers.



1941: Western Air began building modern Fleet Airframes, began building modern Fleet Airframes, began building modern Fleet Airframes, began building modern Fleet Airframes.

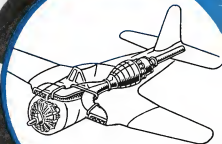
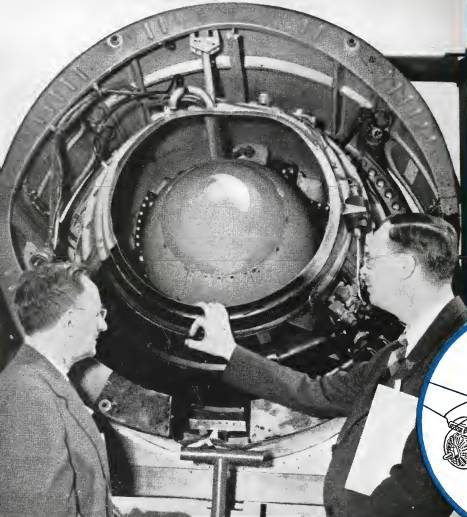


1941-42: In daily flights to Alaska for Air Transport Command, Western's new propeller planes that helped speed the fight all over the world.



1944: With 4000 employees (highways in U.S.) that reach 20 miles in 9 West and 100,000,000 in East, largest plane, system wide improvement of service.





POWER *Plus* - - - ON THE FIREBALL

—and double trouble for an opponent! The Navy Fireball has two engines—one a conventional reciprocating engine, the other a G-E gas turbine. Here, R. G. Standerwick and D. F. Warner, G-E engineers in charge of the development of this turbine, the I-16, are inspecting a mockup of it. As can be seen in the diagram, the turbine is located behind the pilot, and receives air through ducts in the leading edges of the wings. It uses the same fuel as the reciprocating engine. This combination of engines means greater maneuverability, greater climbing speeds, and a greater margin of safety in combat—it's a real balance of power.

Gas-turbine research and development, for which General Electric is especially well fitted, are being continued now, looking to applications on commercial aircraft. The Fireball installation marks a step forward in the trend toward planes with a combination jet and propeller drive. At G-E flight-test headquarters work is being done on several types of aircraft gas turbines, and any information we can give you about this equipment is available to you at any time.

Apparatus Department, General Electric Company, Schenectady 5, N. Y.



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